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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,473	08/01/2006	Ivan Eliashevich	GLOZ 2 00201	6709
27885 FAY SHARPE	7590 09/29/200 LLP	EXAMINER		
	R AVENUE, SEVEN	DIAZ, JOSE R		
CLEVELAND, OH 44114		ART UNIT	PAPER NUMBER	
			2815	
			MAIL DATE	DELIVERY MODE
			09/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/588,473	ELIASHEVICH ET AL.
Office Action Summary	Examiner	Art Unit
	JOSE R. DIAZ	2815
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perionally reply or perionally reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be not will apply and will expire SIX (6) MONTHS froute, cause the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on <u>01</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ Th 3) ☐ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matters, p	
Disposition of Claims		
4) ☐ Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) is/are withdred is/are allowed.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-10 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and are subjected to by the Examination.	rawn from consideration.  /or election requirement.	
10) ☐ The drawing(s) filed on 01 August 2006 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre  11) ☐ The oath or declaration is objected to by the I	e: a) ☐ accepted or b) ☒ objecte ne drawing(s) be held in abeyance. Section is required if the drawing(s) is o	See 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:      1. ☐ Certified copies of the priority docume 2. ☐ Certified copies of the priority docume 3. ☐ Copies of the certified copies of the prapplication from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicationity documents have been rece eau (PCT Rule 17.2(a)).	ation No ived in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summa Paper No(s)/Mail 5)  Notice of Informa 6)  Other:	

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### **DETAILED ACTION**

## **Drawings**

1. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Specification

2. The disclosure is objected to because of the following informalities: Page 7, paragraph 0028: the phrase "With reference to Figure 1" should be changed to -- With reference to Figure 5 --. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Shelton et al. (US 6,958,498 B2)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1 and 8, Shelton discloses a light emitting device including a semiconductor die, the semiconductor die comprising:

an epitaxial structure (stacked structure) arranged on a substrate (12) [Fig. 1 and col. 5, lines 1-6], the epitaxial structure forming an active light generating region (18) between a first layer (16) on a first side of the active region and having a first conductivity type, and a second layer (20) on a second side of the active region and having a second conductivity type, the second side of the active region being opposite the first side of the active region and the second conductivity type being different that the first conductivity type [Fig. 1 and col. 5, lines 7-14];

a first contact (44) in operative electrical communication with the active region via the first layer (16) in the epitaxial structure, the first contact (44) being arranged on a side of the epitaxial structure opposite the substrate (12) [Fig. 1]; a second contact (34) in operative electrical communication with the active region via the second layer (20) in the epitaxial structure, the second contact (34) being arranged on a side of the epitaxial structure opposite the substrate (12) [Figs. 1];

a first contact trace (42) corresponding to the first contact (44) and defined at a surface thereof distal from the substrate (12), the first trace (42) including at least one area designated for bonding (44) [Figs. 2]; and,

a second contact trace (32) corresponding the second contact (34) and defined at a surface thereof distal from the substrate (12), the second trace (32) including at least one area designated for bonding (34) [Figs. 2 and col. 7, lines 25-33];

wherein the first contact trace (42) is substantially enclosed within the second contact trace (32) [Figs. 2].

Regarding claims 2 and 9, Shelton discloses wherein the first layer (16) of the epitaxial structure is formed between the active region (18) and the substrate (12) [Figs. 1].

Regarding claim 3, Shelton discloses wherein: the first conductivity type is n-type, the first contact is an n-type contact, and the first trace is an n-type trace; and, the second conductivity type is p-type, the second contact is a p-type contact, and the second trace is a p-type trace [col. 5, lines 7-14 and col. 11, lines 30-53].

Regarding claim 4, Shelton discloses wherein the first trace (42) forms an open ended elongated sinuous path [Figs. 2].

Regarding claims 5 and 10, Shelton discloses wherein the light emitting device further comprises: a support to which the semiconductor die is mounted [col. 7, lines 26-

27]; and, a plurality of bumps arranged on the support [col. 7, lines 29-34 and col. 10, lines 37-43] the bumps bonding the semiconductor die to the support via the first and second contacts at the areas designated for bonding in the first and second traces [col. 7, lines 29-34 and col. 10, lines 37-43].

Regarding claim 6, Shelton discloses wherein the bumps bond the semiconductor die to the support via a thermosonic bonding process including the application of ultrasonic energy [Col. 10, lines 37-43].

Regarding claim 7, Shelton discloses wherein the surface of the first contact (44) distal from the substrate and the surface of the second contact (34) distal from the substrate are substantially coplanar with one another [Figs. 1].

# **Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-37 of U.S. Patent No. 6,958,498 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-7 claim a device which is similar in scope as the one recited, for example, in claims 1, 9-11, 13, 16,-17, 21-24 of the '498 patent, any differences minor and obvious to one of ordinary skill.

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references teach a LED device: Venugopalan (US 7,141,828 B2) Figure 1; and Kato et al. (US 6,809,340 B2), Figures 2 and 7.

### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSE R. DIAZ whose telephone number is (571)272-1727. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Parker can be reached on (571) 272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jerome Jackson Jr./
Primary Examiner, Art Unit 2815

/J. R. D./ Examiner, Art Unit 2815